

Date: Sun, 31 Oct 93 04:30:27 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V93 #89
To: Ham-Homebrew

Ham-Homebrew Digest Sun, 31 Oct 93 Volume 93 : Issue 89

Today's Topics:

 CB to 40 Meter Conversion?
 how to: spl meters
 Microwave Work at 5 or 10GHz

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 29 Oct 1993 00:59:45 GMT
From: spool.mu.edu!howland.reston.ans.net!usenet.ins.cwru.edu!
cleveland.Freenet.Edu!al838@decwrl.dec.com
Subject: CB to 40 Meter Conversion?
To: ham-homebrew@ucsd.edu

Has anyone attempted to convert an SSB CB radio for use on 40
meters?

Although it would not be a trivial task to change all the tuned
circuits in the receiver front end and in the transmitter driver
and final amplifiers, it doesn't seem like the conversion would
be that difficult.

I looked into this briefly a couple of years ago and it seems
feasible for those radios designed using the single crystal
method of synthesis. Specifically, I was considering a Radio
Shack model TRC-453.

---Eric

--

Eric Grabowski, WA8HEB
Chagrin Falls, Ohio

al838@cleveland.freenet.edu

Date: Sat, 30 Oct 1993 13:58:50 GMT
From: news.service.uci.edu!paris.ics.uci.edu!csulb.edu!library.ucla.edu!
europa.eng.gtefsd.com!howland.reston.ans.net!math.ohio-state.edu!
cyber2.cyberstore.ca!nwnexus!jhgrud!eskimo!mann@network.
Subject: how to: spl meters
To: ham-homebrew@ucsd.edu

In article <1993Oct29.002344.1@bcvms.bc.edu>, lewisbc@bcvms.bc.edu writes:

> What would be necessary to make an inexpensive spl meter?
> And if made, how would you calibrate it? any info would be
> useful
>

Assuming you mean Sound Pressure Level meter:

I have given this one some thought on occasion (like when my kids have their stereo on :-). If I remember right, a log scale meter and amp-mic combination will get you close. Where I get hung up is the freq response. Standard meters have 3 scales, one follows the freq response of a normal human ear, one is linear, I forget what the 3rd is.

As for calibrating the level, I'd use a calibrated meter as a reference. If you want to get super accurate, I >BELIEVE< the reference standard is

0dB SPL = 0.0002 dyne/meter^2.

When I was working in a lab where we did a lot of this type of measurement, the microphone elements we bought were very pricey but we were trying for dynamic ranges around 100dB and very accurate freq response. I guess it all comes down to how accurate do you want to be.

--

Tom "Old" Mann KD9NL/7 Kirkland, Wash.

Date: 27 Oct 93 22:21:39 CST
From: library.ucla.edu!agate!spool.mu.edu!caen!kuhub.cc.ukans.edu!
wsuhub.uc.twsu.edu!mwreed@network.ucsd.edu
Subject: Microwave Work at 5 or 10GHz
To: ham-homebrew@ucsd.edu

Is anyone doing any work at 5 or 10GHz? If your working with it or know someone that is I'd like to visit with you.

mwreed@wsuhub.uc.twsu.edu
n0pco@k0hyd.scks.ks.usa.noam

thanks

Date: Fri, 29 Oct 1993 21:01:23 GMT
From: sdd.hp.com!swrinde!elroy.jpl.nasa.gov!usc!howland.reston.ans.net!agate!
headwall.Stanford.EDU!Cslil!kawai@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <1993Oct29.002344.1@bcvms.bc.edu>, <CFoAr2.HyE@srigenprp.sr.hp.com>,
<2arr3h\$cjg@reznor.larc.nasa.gov>anf
Subject : Re: how to: spl meters

lewisbc@bcvms.bc.edu asks:

| What would be necessary to make an inexpensive spl meter? And if made,
| how would you calibrate it? any info would be useful

N1AL answers:

| Assuming "spl" means "sound pressure level" it wouldn't be hard ...
| Borrow a lab-grade SPL meter to calibrate.

Scott answers:

| ... it's actually not an easy task ... Radio Shack, of all folks, makes
| an acceptable SPL meter for about \$30 ... Better calibrate it before
| using, though.

Depending on what you want to use it for, you might like to buy a unit
instead of making your own. Recommendations for test and measurment
equipment must be put in context -- namely, what is the application?

I use an el cheapo unit, called the Extech 407735. This is a digital sound
level meter, accurate to +/- 2 dB, with two ranges (lo: 35 - 100 dB, hi: 65
- 130 dB), A and C weightings with 0.1 dB resolution, fast and slow
response, built-in calibration at 94 dB, 3 and 1/2 digit LCD, peak hold,
meets ANSI type 2 standards, weighs 7.6 oz, made in Taiwan, uses 9 V
battery, built-in mic, case included, list price \$199, street price \$175. I
bought mine from EIL Instruments. They have an office in LA -- 6212
Peachtree Street, Los Angeles, CA 90040, (213)685-7020, fax (213)721-5751.

The new Radio Shack digital SPL meter looks good, too. As I understand it,

it doesn't come with calibration tools, so you'll need to get your own.

73 DE N6UOK

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End of Ham-Homebrew Digest V93 #89
